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Running Head: PICC DATA COLLECTION

Enhancing Process and Data Collection Efficiency of Peripherally Inserted Central Catheter Insertion for Justification of an Intravenous Access Program

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University of Kentucky

Abstract

This purpose of this paper is to describe the optimizing Peripherally Inserted Central Catheter (PICC) insertion, revising data collection strategies, estimating workloads, and calculating the financial savings generated by the vascular access nurse (VAN). The data gathered will be used in a proposal to start an Intravascular Access Program (IAP).

Evidence Base

PICCs were introduced in the mid-1970s as an alternative to central lines or tunneled catheters, but have only recently become mainstream (Horattas, et al, 2001). The benefits to the patient include relative ease of insertion compared to surgically implanted devices, stated dwell times of six months (Oakley, Wright, & Ream, 2000) to nearly a year (Miller & Deitrick, 1997), decreased risk of intravenous (IV) related complications such as phlebitis and extravasation (Horattas), and elimination of repeated peripheral IV insertions. It has been suggested that PICCs are more cost effective than peripheral IV infusions if the therapy exceeds four days (Ryder, 1995).

The benefits to the institution providing nurse-placed PICCs are patient safety and cost savings. A trained nurse, using ultrasound technology, can place PICCs at the bedside with greater than 90% accuracy (McMahon, 2002; Miller & Deitrick, 1997). The use of the Statlock PICC securement device has significantly reduced catheter migration (McMahon) and complications arising from moving catheter, such as phlebitis and introduction of skin flora into the bloodstream. Bedside PICC placement by the nurse is approximately one-fourth the cost of placement in the radiology suite ($228 vs. $814) (Major & Crow, 2000) with similar complication rates (Barber, Booth, King, & Chakraverty, 2002). The data demonstrating the safety, efficacy, and cost effectiveness of nurse placed PICCs have already resulted in a shift in

practice towards more frequent and earlier referral for PICC placement. This shift in practice, at times, overloads the both the VAN's and the Radiology Department's capacity to insert these lines and deprives many patients and the organization of the benefits of this procedure, resulting in delayed discharge and treatment due to lack of vascular access.

PICC Project Analysis

Members of the Continuum of Care department are aware that the VAN does not have enough time each day to meet the demand for PICC placements, but lacked evidence of workload and evidence of the costs associated delayed PICC placement by the VAN. Having specific in-house evidence of workload and costs will be used at a later date to justify a comprehensive IAP and the personnel to staff it. The goals of improving the current PICC insertion process and developing a database that will help justify an IAP will be achieved by meeting four objectives: (a) Streamline the PICC line tracking process, (b) streamline the PICC placement process, (c) accurately assess demand for PICC services, and (d) evaluate the costs of the different methods of PICC placement.

Objective 1: Streamline PICC line tracking

Assessment. Because data were required to support the need for an IAP, data collection methods for nurse placed PICCs were examined. PICC placement consultations were recorded on an appointment book when received in the office. If received outside of the office, they were literally recorded on a scrap piece of paper and later recorded in the office appointment book. Recording of PICC placements was done on the label of the catheter that was used on the patient and filed for later entry into the Excel database. PICC declotting visits were recorded similarly, with data initially being entered on the baggie that the tPA was delivered to the unit in. When the status of data collected was first assessed in late January 2004, these PICC and tPA package

labels dated back to September 2003. There was also no reconciliation between the appointment book and the labels, providing the opportunity for patient encounters to be omitted and/or lost without realizing it. Data that were entered into the database were mostly incomplete. Looking at the 51 entries for the third quarter of 2003, 47 (92%) were missing at least one piece of datum. There was also a disconnect between the data obtained and the data needed for the database, as well as collection of data that served no purpose for tracking of patients or outcomes. Without accurate tracking of workload and patient outcomes, justification of a new IAP would be difficult. The current data collection method needed an infusion of technology in order to produce quality output.

Outcome. A personal digital assistant (PDA) seemed to be the solution. It is portable, able to be customized, and allows data to be entered at the point of care. A trial version of DDH Software's HanDBase 3.0 software was downloaded and installed on a borrowed PDA. HanDBase was chosen as it has the ability to encrypt fields singularly, as well as the database as a whole, and for DDH Software's awareness of Health Insurance Portability and Accountability Act (HIPAA) requirements (DDH Software, 2003). Using the existing Excel database and items documented in the patient chart, a custom database was built. The PDA database records patient name, date and time of consultation, date and time of insertion, number of times patient was punctured in the process of placement, catheter size, location, and lot number, whether radiology was consulted for placement, whether discharge was delayed, or whether the visit was for PICC declotting. Most data are entered via pop-up menu or checkbox. Data are automatically synchronized with the desktop PC when the PDA is placed in the charging cradle at the end of the day. The PDA is excellent for use at the point of care, but the HanDBase program lacks strong computational capabilities. HanDBase files are easily exported to Excel, so a

computational database was built in Excel. It can be incrementally updated at the VAN's discretion, and the Excel database will automatically generate figures for monthly PICC consultations, VAN insertion success rate, average consult to PICC placement times, number of delayed discharges, and number of radiology consults as a result of VAN being unable to place the PICC line. These data points demonstrate workload, proficiency, and quality of care. Prior to implementing use of the PDA, these statistics were non-existent or likely to be understated.

Sustainability. The trial use of the PDA successfully yielded a more complete data set with more meaningful output; therefore, a Dell Axim X3 was purchased for use by the VAN. The fields of the database were rearranged, added, or subtracted, as the VAN gave feedback on using the PDA during the workday. For example, pop-up menu choices were added for the radiology consultation field to delineate between referring to radiology due to medical complications (i.e. low platelet count) and inability to access vein. This allows for accurate computation of successful insertion rate by not including "no attempt" VAN consultations in the equation. Likewise, the field for dressing type was deleted, as all the dressings applied are the same and the data would not be used in any meaningful way.

This will be the most difficult area to sustain of this project, but it is the key to the success of it. Going from a pen and paper point of care documentation system to using a PDA is a difficult process for someone not used to using computer technology. The VAN expressed a willingness to try it and found it useful enough that she said she could incorporate it into her practice. The VAN is well into the action stage of change, but technical problems with the PDA could easily lead to relapse into pen and paper tracking again. Omission of data can also be detrimental. When the database was audited a week after implementation, 0 of 15 patients entered had consultation dates and times. These data are critical in determining how long a

patient has to wait for a PICC line to be placed. These data were not previously collected, so it is logical that consistent input of it may take longer than with other fields. When it was purpose of collecting these data was reemphasized, the VAN responded that she would keep better track of when she was consulted. Audits of data completeness will be conducted every two weeks while the VAN is becoming familiar with the PDA and the HanDBase program. Once accustomed to using the PDA, it is suggested completeness be audited quarterly.

Objective 2: Streamline PICC Insertion Process

Assessment. The PICC placement process was also examined for efficiency to verify the ability to meet PICC placement demands was not the result of inefficiencies in the placement process or poor time management. The VAN was observed for two days to determine if there were large variations in any of the steps in the PICC placement process. Some variations were noted, so a time study was developed to quantify any delays or variations. The PICC placement process was broken down in to five steps: 1) paperwork and counseling, 2) preparation time, 3) insertion time, 4) clean up, and 5) post-documentation. Actions within each step are listed in Table 1. The time study was conducted on nine PICC placement encounters.

Outcome. The average time for the five steps of the PICC placement process over nine patients was 88.43 ± 46.06 minutes. However, one patient had a 170-minute delay before placement due to being off the floor and not having anyone available to sign the consent form. Since this patient artificially inflated the time to complete the process, the patient was removed, and the average for eight patients was calculated to be 73.32 ± 8.67. Removing this patient dropped the average time by 15 minutes and decreased the variability dramatically. Further references made to the time study will be based on the eight patient cohort. Statistical analysis for the full nine patients and the eight patient subset are found in Table 2. The longest part of the

process was the paperwork and counseling step (24.38 ± 7.05 minutes). It was difficult to break this step down into smaller components due the actions not being performed in the same sequence each time. There were times when supplies had to be obtained prior to opening the PICC kit, causing a delay. The VAN's bag of supplies was not well organized, which led to time being spent searching in the bag, or having to leave the room to get supplies. As a solution, two Plano see-through fishing tackle boxes were purchased and stocked with frequently used supplies. The VAN can now visualize small item inventory and restock as necessary, without inadvertently running out of an item.

Reducing documentation time was also addressed. The 4-french PICC kits come with a check-box, progress note label, whereas the 5-french single and dual lumen catheters do not. Each time a 5-french catheter was placed, a narrative note was required in the chart. Using the 4-french labels as a template, chart labels were designed in Microsoft Word for printing on a four label quartered sheet. The new labels (Attachment 1) were approved by the University of Kentucky Hospital (UKH) Forms Committee and are now in use by the VAN. Each patient also required a Consent for Procedure form to be signed. Each consent was filled out by hand, listing the procedure and risks and benefits. A PICC overprint (Attachment 2) was designed containing all the previously handwritten text. This form is not in use yet, as it is awaiting approval from the legal counsel of UKH. The issue causing the delay was whether or not an advanced practice nurse can obtain informed consent for a procedure.

Sustainability. All of the interventions aimed at improving the efficiency of the PICC placement process have been well received and should be easily sustained. When a change patently simplifies a process, movement through the stages of change can be nearly instantaneous as it was in this case. While the time saved by the organization and documentation

interventions are well received and reported by the VAN to notably decrease the times of patient encounters, redoing the time study is suggested to measure the effects of the interventions. Unfortunately, scheduled clinical hours did not permit enough time to redo the time study on a meaningful number of patients.

Objective 3: Assessing Demand for PICC Services

Assessment. Upon analyzing the 2003 PICC placement data, only 31 of 515 (6%) patients had to wait overnight or longer for a PICC line. While missing data may account for such a low number, weekly 2003 PICC placement average of 9.4 ± 4.4 hours supports the finding. Even with an outlying week with 20 PICC requests, that only averages four placements daily. However, 2004 seemed busier, patients had to wait two, and sometimes three days for a PICC placement, but there were no data to demonstrate it. Data were collected for a two-week period to determine which day(s) of the week were busiest for consultations and insertions, the number of PICC placement requests received, and length of time from consultation request to arrival of the VAN to place the PICC line (Table 3).

Outcome. In the two week period from February 6-20, 2004, 66 PICC referrals were made. This exceeded the 49 PICC referrals for the entire month of February 2003. Given the 1.2 hour average required to place a PICC, maximum output for five, eight-hour days is 30 PICCs a week. During this time, seven were referred by the VAN to radiology. Mondays and Fridays were the busiest days for PICC placements, but were statistically busier. During this portion of the study, the average wait from the VAN receiving the consultation to placing the PICC line was 27.71 ± 24.51 hours, with 54% of all patients receiving PICCs (55) waiting at least one overnight for placement. While the two week timeframe studied may not be enough to

justify an organization change, it does show that demand for PICC lines at UKH can exceed the workload of one VAN.

Sustainability. In 2003, workload numbers were based on a haphazard system of data entry. With the introduction of PDA based PICC tracking, these data are easily entered at the bedside and automatically update the database residing on the desktop computer. When consultation and PICC placement dates and times are entered appropriately, wait times are generated automatically. Documenting consultation time is a new practice for the VAN, but she understands its importance in calculating consultation-to-PICC times and how this time can be used as an indicator of quality service and justification for staffing an IAP. Tracking of workload is less time consuming and is more accurately depicted with the PDA and will yield data that are better suited to base change upon. Workload should be reported to the office of Continuum of Care on a quarterly basis.

Objective 4: Financial Comparison of Methods of PICC Insertion

Assessment. Insurance payers at UKH typically fall into two groups. Diagnosis Related Grouping (DRG) based reimbursement pays the hospital a flat rate based on a single DRG, regardless of cost (Health Economics Resource Center, 2002). Per diem payers pay a flat rate per each inpatient day, regardless of cost. It costs $146 (Table 4) for the VAN to place a PICC at the bedside. The other option is for the radiology staff to place the PICC line using angiography. Each time a PICC is placed using angiography, it costs $2139 (Table 4). A bedside placed PICC generates only 6.85% of the costs of a PICC placed in radiology with similar outcomes being documented in literature (Barber, Booth, King, & Chakraverty, 2002). Patients are frequently referred to radiology when the VAN cannot place the PICC in a timely manner. There is only

anecdotal evidence that this occurs and is not tracked currently. Even though the number of times this occurs is not concrete, the cost savings of VAN bedside PICC placement is.

Outcome. While is was not possible to determine the number of PICC placement referrals to radiology due to PICC demand exceeding the VAN's supply of time in 2003, it was possible to compare radiology's PICC placement workload to that of the VAN for the same period of time. There were 273 PICCs placed in radiology in 2003. Weekly average of placements was 5.15 ± 3.35. The VAN placed 515 PICCs, averaging 9.4 ± 4.4. Radiology had three weeks in which the number of PICC placements were statistically higher than the average (Table 5). Coincidentally, these were the weeks the VAN was on vacation. The 44 PICCs placed by radiology in these three weeks cost over $87,500 more than it would have cost a nurse to place these PICCs at the bedside. An IAP could be funded and staffed with these cost savings alone.

There was also a notable gap in the 515 PICC lines placed by the VAN in 2003 and the 273 inserted by radiology and the 168 PICC products that were charged to the patient by the facility during the same time. Only 21.3% of PICC lines used were actually charged as being used. This percentage is likely much lower because the denominator of the equation does not include PICC lines placed by Neonatal Intensive Care Unit or Pediatric Intensive Care Unit nurses. This finding was purely incidental and discovered while reviewing other cost data. This discovery of at least 620 uncharged for PICC kits represents nearly $54,000 of unaccounted supplies. It is not an objective of this project to remedy the situation, but it does warrant further inquiry into the way PICC kits are charged to the patient.

Sustainability. Continuing practice in the current manner is not cost effective. In conversation with radiology technicians, it is said hat doing PICC lines under angiography

prevents the room from being used for other procedures that get reimbursed well. Examining the costs and reimbursements of other angiographic procedures could be done in the future as it appears the results would likely show that radiology placed PICC lines carry a large opportunity cost, in terms of lost revenue and delay of more urgent procedures, to the radiology department. Having more capacity to place PICCs at the bedside would free up the radiology department to do procedures that generate revenue rather than expenses.

Summary

The four objectives of this project were: (a) streamline the PICC line tracking process, (b) streamline the PICC placement process, (c) accurately assess demand for PICC services, and (d) evaluate the costs of the different methods of PICC placement in UKH. The ultimate goal is to optimize the current PICC placement resources and use the evidence collected to justify the creation of an Intravascular Access Program at UKH. This program will not only help UKH increase the availability of PICC line placements to patients and decrease the costs of doing so, but also increase the ability to monitor quality indicators for all intravascular care. This project was successful in meeting its objectives. The implementation of PICC data tracking by PDA helped increase the completeness of data that allows for meaningful analysis. The PICC placement process was made more efficient by organizing supplies and creating forms that decreased narrative charting. Demand for and utilization of VAN and radiology PICC insertions were documented and cost comparisons were made between the two methods. The evidence collected should be utilized in the development of an IAP proposal in the near future.

Conclusions

Undertaking this project has been an invaluable experience in leadership. The approach used was based on the nursing process of assessment, planning, intervention, and evaluation.

Each objective of the project implementation required using this process. The most challenging portion was staying focused on the objectives of the project when the assessment and intervention phase uncovered more problems. The large disparity between PICCs placed and PICCs charged for is cause for concern. The charging process appears flawed and I find it difficult to consider it resolved, as far as this project was concerned, by simply notifying the Director of Continuum of Care.

The key to leadership is people. There are no leaders without followers. Interacting with all of the different people and personalities of a collaborative effort is challenging. Each encounter requires careful assessment of the other person's values and how to phrase your needs in a way that appeals to what they feel is important. It may be as simple as engaging a person by making reference to a picture on their desk that breaks down a barrier of progress. Knowing your champions is also very important. Saying you are a student working on a project when asking for data can leave one empty handed, but saying you are a student working with a respected person within the facility opened many doors during this experience. Without people and the ability to work with people, no project can be expected to succeed.

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Table 1

Step Definitions for PICC Time Study

Step	Definition	Actions Included
Paperwork/Counselling	Transit to floor to opening of PICC kit	Chart review, patient counselling, filling out and signing consent, preparing/ cleaning room, ultrasound assessment
Prep Time	From opening kit to inject of Xylocaine	Preparation of sterile field, gowning and gloving, skin prep/decontamination
Insertion Time	Actual insertion of PICC line	Insertion of PICC and dressing insertion site
Clean Up Time	From dressing to beginning of post procedure documentation	Cleaning up and disposing of supplies, transit to charting area
Post-Documentation	From beginning of charting to leaving patient care area	Charting

Table 2

Time Study Results (n=9)

Step	Mean ± SD (minutes)	Range (minutes)
Paperwork and counseling	41 ± 49	17 - 170
Prep time	15 ± 3	10 - 21
Insertion time	14 ± 7	10 - 33
Clean up	8 ± 3	3 - 13
Post documentation	11 ± 2	9 - 16
Total time	88 ± 46	60 - 209

Time Study Results – Outlying Data Point Removed (n=8)

Step	Mean ± SD (minutes)	Range (minutes)
Paperwork and counseling	24 ± 7	17 - 38
Prep time	15 ± 3	10 - 21
Insertion time	15 ± 8	10 - 33
Clean up	8 ± 3	3 -13
Post documentation	11 ± 2	9 - 16
Total time	73 ± 9	60 - 88

Table 3
Two Week Workload Analysis

	N (%)
# consults per day of week (n=66)	
Monday	23 (35)
Tuesday	14 (21)
Wednesday	8 (12)
Thursday	8 (12)
Friday	11 (17)
Saturday	2 (3)
Sunday	0 (0)
# PICC visits per day of week (n=55)	
Monday	15 (27)
Tuesday	9 (16)
Wednesday	10 (18)
Thursday	6 (11)
Friday	14 (26)
Saturday	0 (0)
Sunday	1 (2)
*PICC placed on visit (n=66)**	
Yes	41 (62)
No	19 (29)
Declotting visit	4 (6)
Other visit	2 (3)

* n exceeds 30 PICC encounters per week capability due to VAN working more than 8 hours on some days to prevent excessive delays in PICC placement

Reasons PICCs not placed (n=19)	
Initial radiology referral (medical)	7 (37)
Referral to radiology after attempt	3 (16)
Patient discharged	1 (5)
Done by SWAT nurse	1 (5)
No longer indicated	3 (16)
Unknown	3 (16)
No time to place	1 (5)
Patients waiting overnight (n=54)	
Same day	21 (39)
One day or more	29 (54)
Over weekend	4 (7)

Table 3 Continued

Two Week Workload Analysis

(n=49)	Mean ±SD (hours)	Range
Time from consult to seeing patient	27.71±24.51 (3.20-52.22)	0.50-97.00

Table 4

Cost of PICC Placement at Bedside and Under Angiography

Items	Cost
Nurse Placed	
5 French Dual Lumen PICC	$95
Modified Seldinger Kit	$24
1.2 hours time*	$27
Total	$146
Radiology Placed	
PICC Supplies**	$240
Angiography Pack	$307
Examination	$197
Contrast	$84
Professional Cost**	$1311
Total	$2139

* Computed at hourly rate of $18.80, plus 20% benefit rate ($3.76), multiplied by the average encounter time of 1.2 hours.

** Line item detailing is not available

Table 5

2003 PICC Placements by VAN

(n=515)	Mean ±SD	Median
Weekly	9.4 ± 4.4	10
Monthly*	41.7 ± 13.0	43

2003 PICC Placements by Radiology

(n=273)	Mean ±SD	Median
Weekly**	5.2 ± 3.4	5
Monthly	22.8 ± 8.5	22

* July was the only month statistically busier than the mean ($p = .042$)

** The three weeks that were statistically busier were: April 7-13, 2003 - 17 ($p < .0002$), June 23-29, 2003 - 14 ($p < .005$), Sept 29-Oct 5, 2003 - 13 ($p < .01$). These weeks coincide with the VAN being on vacation.

University of Kentucky Hospital
A. B. Chandler Medical Center
Lexington, Kentucky

Consent for Insertion of Peripherally Inserted Central Catheter (PICC)

Patient Name:

Medical Record #:

Date of Birth

Addressograph

Instructions to patient: Cross out any language for which you do not give consent.

1. The nature and purpose of the operation or procedure, the possible alternative methods of treatment, the risks involved, and the possibility of complications have been fully explained to me. I acknowledge that no guarantees have been made to me concerning the results of the operation or procedure. I understand the nature of the operation or procedure to be:

   Insertion of PICC

   performed by or under the direction of Dr. _____, attending physician.

2. Risks and alternatives to this operation or procedure include, but are not limited to:

   Infection, vein irritation, bleeding, bruising, malposition, irregular heart rhythm, blood clot, damage to adjacent structures, failure to access vein.

3. I consent to the performance of such additional operations or procedures as are considered necessary or desirable in the judgment of the medical staff of this facility.

4. I consent to the administration of such anesthesia services as may be considered necessary or desirable in the judgment of the medical staff of this facility. Except _____

I have read this consent form, or it has been explained to me. I fully understand the planned operation(s), procedure(s) and / or transfusions and their risks.

_____
Signature of patient

_____
Signature of patient's legal next-of-kin or legal guardian (only when a patient is a minor, mentally incompetent, or unable to give consent in an emergency)

_____
Relationship to patient, or authority to give consent

_____
Signature of physician describing operation(s), procedure(s), and / or transfusions and risk(s)

_____
Date (month, day, year) Time (am / pm)

_____
Signature or title of witness (optional)

PICC/midline Insertion Progress Note

Patient Name: _____

Catheter Type:
☐ BD L-Cath ☐ BD First PICC ☐ BD First Midcath ☐ Other _____
Gauge:_____ External length: _____ Internal length: _____

Insertion date: _____ **Catheter lot #:** _____

Introduction method:
☐ Peel Away needle ☐ BD Introsyte ☐ Mod. Seldinger
☐ Ultrasound used ☐ Other: _____

Insertion site (vein): ☐ LEFT ☐ RIGHT
☐ Median Cubital Basilic ☐ Median Cubital Cephalic ☐ Basilic
☐ Cephalic ☐ Other: _____

X-Ray Confirmation: ☐ Yes ☐ No

Tip Location: ☐ Superior Vena Cava ☐ Inferior Vena Cava ☐ Other:
_____

Blood loss: _____ ml

Initial Dressing:
☐ Transparent ☐ Tape and gauze ☐ Other: _____

Securement: ☐ Tape strips ☐ Foam tape ☐ StatLock
☐ Other: _____

Recommendations for care: ☐ Patient teaching packet given to patient
Flush catheter every: _____and prn with _____ml of _____
_____
Dressing change every: _____ and prn

Note: Each lumen should be treated as an individual catheter.

D1225 (03/04)

PICC/midline Insertion Progress Note

Patient Name: _____

Catheter Type:
☐ BD L-Cath ☐ BD First PICC ☐ BD First Midcath ☐ Other _____
Gauge:_____ External length: _____ Internal length: _____

Insertion date: _____ **Catheter lot #:** _____

Introduction method:
☐ Peel Away needle ☐ BD Introsyte ☐ Mod. Seldinger
☐ Ultrasound used ☐ Other: _____

Insertion site (vein): ☐ LEFT ☐ RIGHT
☐ Median Cubital Basilic ☐ Median Cubital Cephalic ☐ Basilic
☐ Cephalic ☐ Other: _____

X-Ray Confirmation: ☐ Yes ☐ No

Tip Location: ☐ Superior Vena Cava ☐ Inferior Vena Cava ☐ Other:
_____

Blood loss: _____ ml

Initial Dressing:
☐ Transparent ☐ Tape and gauze ☐ Other: _____

Securement: ☐ Tape strips ☐ Foam tape ☐ StatLock
☐ Other: _____

Recommendations for care: ☐ Patient teaching packet given to patient
Flush catheter every: _____and prn with _____ml of _____
_____
Dressing change every: _____ and prn

Note: Each lumen should be treated as an individual catheter

D1225 (03/04)

PICC/midline Insertion Progress Note

Patient Name: _____

Catheter Type:
☐ BD L-Cath ☐ BD First PICC ☐ BD First Midcath ☐ Other _____
Gauge:_____ External length: _____ Internal length: _____

Insertion date: _____ **Catheter lot #:** _____

Introduction method:
☐ Peel Away needle ☐ BD Introsyte ☐ Mod. Seldinger
☐ Ultrasound used ☐ Other: _____

Insertion site (vein): ☐ LEFT ☐ RIGHT
☐ Median Cubital Basilic ☐ Median Cubital Cephalic ☐ Basilic
☐ Cephalic ☐ Other: _____

X-Ray Confirmation: ☐ Yes ☐ No

Tip Location: ☐ Superior Vena Cava ☐ Inferior Vena Cava ☐ Other:
_____

Blood loss: _____ ml

Initial Dressing:
☐ Transparent ☐ Tape and gauze ☐ Other: _____

Securement: ☐ Tape strips ☐ Foam tape ☐ StatLock
☐ Other: _____

Recommendations for care: ☐ Patient teaching packet given to patient
Flush catheter every: _____and prn with _____ml of _____
_____
Dressing change every: _____ and prn

Note: Each lumen should be treated as an individual catheter.

D1225 (03/04)

PICC/midline Insertion Progress Note

Patient Name: _____

Catheter Type:
☐ BD L-Cath ☐ BD First PICC ☐ BD First Midcath ☐ Other _____
Gauge:_____ External length: _____ Internal length: _____

Insertion date: _____ **Catheter lot #:** _____

Introduction method:
☐ Peel Away needle ☐ BD Introsyte ☐ Mod. Seldinger
☐ Ultrasound used ☐ Other: _____

Insertion site (vein): ☐ LEFT ☐ RIGHT
☐ Median Cubital Basilic ☐ Median Cubital Cephalic ☐ Basilic
☐ Cephalic ☐ Other: _____

X-Ray Confirmation: ☐ Yes ☐ No

Tip Location: ☐ Superior Vena Cava ☐ Inferior Vena Cava ☐ Other:
_____

Blood loss: _____ ml

Initial Dressing:
☐ Transparent ☐ Tape and gauze ☐ Other: _____

Securement: ☐ Tape strips ☐ Foam tape ☐ StatLock
☐ Other: _____

Recommendations for care: ☐ Patient teaching packet given to patient
Flush catheter every: _____and prn with _____ml of _____
_____
Dressing change every: _____ and prn

Note: Each lumen should be treated as an individual catheter.

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